

IN THE CLAIMS

This listing of claims below will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1 to 11 (canceled).

Claim 12 (previously presented): A radar system, comprising:

at least one radar device having a sensor and a transmitter configured to transmit data, wherein the sensor and the transmitter are simultaneously operable for a communication.

Claim 13 (previously presented): The radar system as recited in claim 12, wherein the at least one radar device is a pulse-type radar device having a predefined transmission/reception spectrum with a transmission frequency range for the transmission of data and having a notch filter configured to selectively attenuate frequency subranges containing spectral components of a sensing signal within the transmission frequency range.

Claim 14 (previously presented): The radar system as recited in claim 12, wherein the at least one radar device is a pulse-type radar device having a predefined transmission/reception spectrum, a transmission frequency range provided for the transmission of data being in a peripheral region of the predefined transmission/reception spectrum.

Claim 15 (previously presented): The radar system as recited in claim 14, wherein the peripheral region includes no more than the upper and lower 10% of the transmission/reception spectrum.

Claim 16 (previously presented): The radar system as recited in claim 13, wherein the transmission frequency range includes a plurality of individual frequency bands, each for the transmission of data from a different data class.

Claim 17 (previously presented): The radar system as recited in claim 16, wherein the different data classes include at least one of emergency data, log data and communications data.

Claim 18 (previously presented): The radar system as recited in claim 12, wherein the at least transmitter provides amplitude modulation for the transmission of emergency data, and provides PSK types of modulation for the transmission of communications data and log data.

Claim 19 (previously presented): The radar system as recited in claim 12, wherein the radar system is for a motor vehicle.

Claim 20 (previously presented): A radar signal receiver configured to receive a communications data signal and feeding the communications data signal to a demodulation device, wherein the communications data signal is in a radar signal of a radar system according to claim 12.

Claim 21 (previously presented): A radar transmitter comprising:
an element configured to simultaneously emit a broadband signal for sensing and a communications data signal, wherein the broadband has a transmission/reception spectrum with a peripheral region, and the communications data signal is in a peripheral region of a of the broadband signal.

Claim 22 (previously presented): A cooperative radar device system comprising a plurality of radar systems as recited in claim 12, wherein each of the plurality of radar systems is configured to sense its respective surroundings and simultaneously exchange data with another of the plurality of radar systems.

Claim 23 (previously presented): A vehicle having a radar system as recited in claim 12.

Claim 24 (previously presented): A method for sensing and transmitting data using a radar system having at least one radar device, the method comprising:

sensing and transmitting data simultaneously using the at least one radar device in a pulsed mode, wherein the transmitting of data is performed using a frequency range in a peripheral region of a transmission/reception spectrum of the sensing signal.